Carbon Sequestration Advisory Committee – A Report to Idaho's Legislature

As directed by SB 1379a

New chapter 22-5106

Facilitated (chaired) by the Idaho Soil Conservation Commission

SCC Report to the Legislature

By February 1, 2003, a report(s) is to be prepared for the Idaho Legislature, which…

1) *Describes the potential* for carbon (GHG - green house gas) market(s) in Idaho, pertaining to agricultural lands, forest lands, and biofuels;
2) Characterizes the *agricultural, forest and biofuel practices/activities* which sequesters carbon and/or reduces emissions,

SCC Report to the Legislature

3. Describes existing methods for *measuring & modeling* carbon (GHG) sequestration and related emission reductions;
4. Discusses any necessary *legislation* for enhancing carbon sequestration, protecting private property rights, etc.;
5. Identifies scientific *uncertainty* in quantifying sequestration, related emissions, etc.;
6. Presents other committee *recommendations*.

Carbon Sequestration Advisory Committee

The 16 member, Governor appointed committee
Idaho Law 22-5201, initiated by S 1379a

- **ISDA – Jim baker**
- **DEQ – Kate Kelly**
- **IDL – Ladd Livingston**
- **U of I - Jodi Johnson-Maynard**
- **Electrical Producer – John Carstensen**
- **Crop/Livestock Producers:**
  - **John Remsburg**
  - **Charlotte Reid**
  - **Delbert Winterfield**
  - **Russ Zenner**
- **Soil Conservation District – Claude Bruce**
- **Biofuels – Paul Mann**
- **Transportation – Julie Shain**
- **Conservation Organization – Tom Lamar**
- **Forestry – Charley McKetta**
- **Carbon Sequestration Expert– David Shropshire**
- **ISCC – David Ferguson**

Report Outline

Draft Copies of Executive Summary, Outline, and Recommendations Provided

Refer to handout – outline enclosed.

Small Group Tasks

Small group objectives/tasks:

1. Review each practice/activity proposed within the report, with the use of the discussion guidesheet,
   a) Effectiveness, review and record metric tons CO2e/acre per year (or years), discuss process used to estimate effectiveness, record uncertainties, lack of data, etc.;
   b) Acceptability of practice/activity by landowners, industries, etc.;
   c) Costs – installation, operation, maintenance, contract development, tracking progress, administration, etc.;
   d) Implementation – how easily is it to install or apply, limitations;
   e) Operation and maintenance – how easy, restraints, life-span, etc.;
   f) Monitoring and verification – how to check that practice is operating and being maintained according to a standard, and how to verify a quantity of carbon gained or emissions reduced;
   g) Ancillary benefits – what other benefits does the practice/activity provide?;

Small Group Tasks

Small group objectives/tasks (continued):

1. Practice review (continued)
   h) Statewide potential – estimate minimum & maximum % applied, e.g. today's rate/amount to a high amount because of opportunities within a carbon market (additional funding),
   i) Discuss any practices that should be added to report.
2. Discuss socio-economic impacts of a carbon market (outside funding source), how it may alter the current use and application rate of practices/activities, how local economies may be impacted;
3. List uncertainties, questions, recommendations to improve individual practice and statewide estimates;
4. Discuss research needs, legislation and state-wide policies needed to enhance practice/activity implementation.

Committee Tasks

1. Upon small group presentations, discuss and confirm small group decisions, questions, recommendations, uncertainties, future research needs, etc.;
2. Confirm committee recommendations to be written in the report, for Idaho legislature and Governor,
3. Discuss future tasks, those needed to update report, prepare for future carbon markets, (volunteers welcome!),
4. Discuss regional partnership with other states, e.g. for funding, research, carbon markets, etc.

QUESTIONS

Evaluation Criteria

EFFECTIVENESS:

How much carbon can be sequestered/stored? Per unit (acre, no.)?

How long carbon be stored?

What other greenhouse gases are reduced on-site?

Can it directly offset global emissions? N_2O, CH_4, etc.

Can it indirectly offset global emissions?

Evaluation Criteria

ACCEPTABILITY:

How likely is this practice/activity adopted?

Is it being adopted now?

How much is it currently being adopted?

Where is it being adopted?

How well would it be adopted with barriers reduced or eliminated?

Evaluation Criteria

COST (Installation, operation, and maintenance):

How expensive to install?

Are costs re-captured through enhanced production, reduced inputs, less operational and maintenance costs?

Are operation and maintenance costs high? Higher than existing management?

Are transaction costs high during aggregation of participants?

Are there associated legal fees, planning and design costs, etc.

Evaluation Criteria

IMPLEMENTATION:

How easily is this practice/activity installed, adopted?

Are there physical limitations to it being installed?

What are the social and/or legal barriers to installation/adoption?

If sufficient funds (e.g. cost share) are made available to install, operate, and maintain, what would still keep it from being installed/adopted?

Evaluation Criteria

OPERATION & MAINTENANCE:

How easily is this to operate and maintain?

How well are existing practices/activities being maintained?

Are there off-site impacts related to maintenance?

Costs? Time?

Evaluation Criteria

MONITORING & VERIFICATION:

Where monitoring = tracking, status evaluation, non-measurement activity.

Where verification = measuring a quantity of carbon actually was stored.

How easy is it to monitor, track the practice/activity's operation and maintenance?

Can we actually measure stored carbon or greenhouse gas emissions? Can we easily quantify?

Models? – baseline and post-implementation estimates

Can we measure with remote sensing or indirect measurement techniques? (e.g. measure conductivity in place of carbon)

Evaluation Criteria

ANCILLARY BENEFITS:

Increase in net profit to owner/operator?

Benefit to local economy? Increased employment, increased market value of products, etc.

Other natural resource benefits? Water quality, fisheries, wildlife, etc.

Idaho Potential Evaluation

Look at statewide potential of practices/activities being adopted:

Where are practices/activities already being adopted in state?

Where might we see greater adoption in state?

Private lands, state lands, public lands – how might adoption of differ? Barriers?

How might we best describe the statewide potential of practice/activity? Carbon sequestration?

Ratings

While reviewing each practice/activity, you will rate it, for each criteria, numerically:

Each criteria will receive a numeric ratings: *–3 to 3*.

This is subjective, but upon giving a numeric rating for all criteria, the ratings are then summed, providing a weighted rating.

The practices can then be compared to one-another.

Compare this ranking to just the effectiveness value for each practice/activity – this exercise will help define potential. See handouts.

QUESTIONS